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Terms	Documents
L8 and ((435/110)!.CCLS. )	0

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**Database:** IBM Technical Disclosure Bulletins**Search:**

L16

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result set

*DB=USPT,PGPB; PLUR=YES; OP=AND*

<u>L16</u>	L8 and ((435/110)!.CCLS. )	0	<u>L16</u>
<u>L15</u>	L8 and ((435/109)!.CCLS. )	0	<u>L15</u>
<u>L14</u>	L8 and ((435/105)!.CCLS. )	0	<u>L14</u>
<u>L13</u>	L8 and ((435/100)!.CCLS. )	0	<u>L13</u>
<u>L12</u>	L8 and ((435/72)!.CCLS. )	0	<u>L12</u>
<u>L11</u>	L8 and ((536/23.1)!.CCLS. )	68	<u>L11</u>
<u>L10</u>	L8 and ((536/1.11)!.CCLS. )	1	<u>L10</u>
<u>L9</u>	L8 and ((424/78.08)!.CCLS. )	0	<u>L9</u>
<u>L8</u>	L6 and 17	393	<u>L8</u>
<u>L7</u>	stable near6 (preparation or formulation) or controlS near3 releasS	74575	<u>L7</u>
<u>L6</u>	14 and 15	678	<u>L6</u>
<u>L5</u>	preservS	199179	<u>L5</u>
<u>L4</u>	11 and 12 and 13	1261	<u>L4</u>
<u>L3</u>	(aspartic or glutamic or citric or tartaric) adj acid	92859	<u>L3</u>
<u>L2</u>	saccharide or glucose or fructose or galactose or sucrose or maltose or lactose or trehalose or sorbitol or mannitol	163727	<u>L2</u>
<u>L1</u>	gene near5 (preparation or formulation)	3521	<u>L1</u>

END OF SEARCH HISTORY

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 1 of 1 returned.**☐ 1. Document ID: US 6326481 B1

L10: Entry 1 of 1

File: USPT

Dec 4, 2001

US-PAT-NO: 6326481

DOCUMENT-IDENTIFIER: US 6326481 B1

TITLE: Molecules of the AIP-related protein family and uses thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Draw Desc
Image												

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Terms	Documents
L8 and ((536/1.11 )!.CCLS. )	1

**Display Format:** [Change Format](#)[Previous Page](#)[Next Page](#)

=> d his

(FILE 'HOME' ENTERED AT 17:25:24 ON 16 OCT 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 17:26:21 ON 16 OCT 2002

L1 5504 S GENE(5A) (PREPARATION OR FORMULATION)  
L2 692621 S SACCHARIDE OR LYSINE OR ASPARAGENE OR HISTIDINE OR TYROSINE  
O  
L3 1434240 S GLUCOSE OR GALACTOSE OR FRUCTOSE OR SUCROSE OR MALTOSE OR  
LAC  
L4 292605 S (GLUTAMIC OR ASPARTIC OR CITRIC OR TARTARIC) (W)ACID  
L5 427 S L1 AND L2  
L6 11 S L5 AND L3 AND L4  
L7 14 S L1 AND L3 AND L4  
L8 11 DUP REM L6 (0 DUPLICATES REMOVED)  
L9 14 DUP REM L7 (0 DUPLICATES REMOVED)

=> d au ti so ab 1-11 l8

L8 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS  
IN Farwick, Mike; Mockel, Bettina; Pfefferle, Walter  
TI Use of ptsH gene of Corynebacterium glutamicum for L-lysine  
biosynthesis  
SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 755,187.  
CODEN: USXXCO  
AB The invention relates to the ptsH gene of Corynebacterium glutamicum  
coding for component H of the phosphotransferase system. Also provided  
is  
of a process for the fermentative prodn. of L-amino acids with enhancement  
the ptsH gene and the use of the above polynucleotides as primer or  
hybridization probe. In another embodiment, mutants of the ptsH gene are  
provided.

L8 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2002 ACS  
IN Mockel, Bettina; Pfefferle, Walter; Marx, Achim  
TI Nucleotide sequences coding for the genes sucC and sucD  
SO U.S. Pat. Appl. Publ., 19 pp., Cont. in-part of U.S. Ser. No. 728,498.  
CODEN: USXXCO  
AB The invention provides polynucleotides coding for the genes sucC and sucD  
and for the resulting amino acids which encode for the enzyme suuccinyl  
CoA synthetase. Also provided is a process for the fermentative prodn.  
of  
L-amino acids using coryneform bacteria in which the genes are present in  
attenuated form, and the use of the polynucleotide sequences as  
hybridization probe. Thus the genes sucC and sucD from Corynebacterium  
glutamicum ATCC 13032 were identified and isolated from a C. glutamicum  
sequence library. Inactivation of either gene increased yields of L-  
**glutamic acid** from C. glutamicum. Inactivation of sucC  
increased the yield of **glutamic acid** from 20 mg/L to  
154 mg/L. Inactivation of sucD had a similar but smaller effect.

L8 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2002 ACS  
IN Nampoothiri, K. Madhavan; Mockel, Bettina; Eggeling, Lothar; Sahm,  
Hermann  
TI Protein and gene sequence of the cma gene encoded cyclopropane-mycolic  
acid synthase of Corynebacterium glutamicum  
SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 577,857,

abandoned.

CODEN: USXXCO

AB The invention relates to a genetically modified coryneform bacterium, the cma gene of which is amplified, and an isolated polynucleotide which codes

for cyclopropane-mycolic acid synthase from coryneform bacteria, and also a method for the fermentative prepn. of L-amino acids with amplification of the cma gene in the bacteria and the use of the polynucleotide as a primer or hybridization probe.

L8 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2002 ACS

IN Nampoothiri, Madhavan; Moeckel, Bettina; Eggeling, Lothar; Sahm, Hermann

TI Genetically modified Coryneform bacteria with overexpressed cma

**gene** and uses thereof in fermentative **preparation** of

L-amino acids

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

AB This invention relates to a genetically modified coryneform bacterium, the

cma gene of which is over-expressed, and to an isolated polynucleotide, which codes for cyclopropane-mycolic acid synthase from coryneform bacteria and to a process for the fermentative prodn. of L-amino acids with amplification of the cma gene in the bacteria and to the use of the polynucleotide as a primer or hybridization probe. The invention

provides

novel auxiliaries for the improved fermentative prodn. of amino acids, in particular L-**lysine** and L-glutamate. Sequences of Corynebacterium glutamicum cma gene are also disclosed. Control cells transformed with the empty expression vector produced almost the same

amt.

of L-**lysine** and L-glutamate as cells transformed with the vector contg. the cma gene.

L8 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS

IN Sugimoto, Masakazu; Nakai, Yuta; Ito, Hisao; Kurahashi, Osamu

TI Process for producing l-amino acid and novel gene

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

AB A gene encoding **fructose** phosphotransferase (I) of Escherichia coli is transferred into a coryneform bacteria capable of producing L-amino acids such as L-**lysine** and thus the **fructose** phosphotransferase activity is potentiated, thereby improving the L-amino acid productivity. Cloning of the I **gene** of E. coli, **prepn.** of recombinant Corynebacterium lactofermentum by elec. pulse-mediated transformation, fermn. of L-**lysine** and L-**glutamic acid** with the recombinant C. lactofermentum were shown. Also cloning of I gene of C. lactofermentum ATCC13869 was shown.

L8 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS

IN Mockel, Bettina; Pfefferle, Walter; Marx, Achim

TI Corynebacterium succinate dehydrogenase genes sdhA, sdhB, and sdhC and amino acid production with recombinant coryneform bacteria

SO Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

AB Genes sdhA, sdhB, and sdhC for subunits of C. glutamicum succinate dehydrogenase are disclosed. Coryneform bacteria with one of these genes inactivated may be used to produce amino acids. Thus, C. glutamicum with sdhA insertionally inactivated was cultured to produce 155 mg **glutamic acid**/L while the parent strain only produced 41

mg/L.

L8 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS  
IN Terada, Masaaki; Ochiya, Takahiro; Sano, Akihiko; Hisada, Akihiko;  
Nagahara, Shunji  
TI Stable therapeutic **gene preparations**  
SO PCT Int. Appl., 64 pp.  
CODEN: PIXXD2  
AB Disclosed are **formulations** for **gene** therapy capable of  
sustaining high stability during the prodn. process and storage. These  
formulations contain **saccharides, non-**  
**hydrophobic amino acids**, and/or org. acids  
having .gtoreq.2 carboxyl groups (excluding amino acids), or collagen or  
gelatin and at least one amino acid. A sustained-release stick prepn.  
was  
80 prepd. from 100 .mu.g/mL plasmid vector pCAHST-1 (encoding FGF-4) soln.  
mL, 0.86 % atelocollagen soln. 29.1, water 60 g, and 11 mg/mL  
**glucose** soln. 10 mL.

L8 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2002 ACS  
IN Tsuchiya, Makoto; Miwa, Kiyoshi  
TI Sucrase gene of coryneform bacteria and manufacture of amino acids or  
nucleic acids with recombinant coryneform bacteria  
SO U.S., 12 pp.  
CODEN: USXXAM  
AB The present invention provides a DNA fragment derived from Coryneform  
bacteria and contg. a gene coding for a protein having sucrase activity  
and a recombinant DNA vector contg. said DNA fragment and capable of  
expression in Coryneform bacteria. The recombinant DNA is introduced  
into  
Coryneform bacteria to enhance their sucrase activity. By using the  
bacteria having enhanced sucrase activity a method is provided for  
efficiently producing L-amino acids and nucleic acids in a short period  
of  
time. **Lysine**-producing Brevibacterium lactofermentum  
transformed with a sucrase expression plasmid produced the same amt. of  
**lysine** (from **sucrose**) in approx. half the time.

L8 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2002 ACS  
IN Sugimoto, Masakazu; Otsuna, Seiko; Nagase, Kazuo; Tsuchiya, Makoto;  
Hiroshi, Matsui; Yasuhiko, Yoshihara; Nakamatsu, Tsuyoshi  
TI Sucrase gene derived from coryneform bacteria and manufacture of amino  
acids with recombinant microorganisms  
SO Eur. Pat. Appl., 24 pp.  
CODEN: EPXXDW  
AB The present invention provides a DNA fragment derived from Coryneform  
bacteria and contg. a gene coding for a protein having sucrase activity  
and a recombinant DNA contg. said DNA fragment. The recombinant DNA is  
introduced into Coryneform bacteria to enhance their sucrase activity.  
By  
using the bacteria having enhanced sucrase activity a method is provided  
for efficiently producing L-amino acids and nucleic acids in a short  
period of time. The sucrase gene of Brevibacterium lactofermentum was  
cloned. B. lactofermentum transformed with this gene and cultured on  
**sucrose**-contg. substrate produced **lysine** and  
**glutamic acid** at a greater rate than did the  
non-transformed parents.

L8 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS

IN Rudolph, Rainer; Kopetzki, Erhard; Fischer, Stephan; Grossmann, Adelbert; Hoell-Neugebauer, Baerbel

TI Immobilized fusion proteins as biocatalysts: preparation and use

SO Ger. Offen., 13 pp.  
CODEN: GWXXBX

AB Biocatalysts are prepd. by expressing chimeric genes for enzymes fused to binding peptides in host cells, isolating and binding the fusion proteins to a carrier having affinity for the binding peptide, and using the immobilized biocatalyst for prepn. of a desired product from a substrate. A plasmid encoding .alpha.-glucosidase fused to the hexapeptide Arg6 was prepd. and the chimeric gene expressed in Escherichia coli. The fusion protein was isolated from the cells and immobilized on Fraktogel EMD SO3--650. The resulting biocatalyst was used to prep. **glucose** from **maltose**.

L8 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS

AU Markussen, J.; Diers, I.; Engesgaard, A.; Hansen, M. T.; Hougaard, P.; Langkjaer, L.; Norris, K.; Ribel, U.; Soerensen, A. R.; et al.

TI Soluble, prolonged-acting insulin derivatives. II. Degree of protraction and crystallizability of insulins substituted in positions A17, B8, B13, B27 and B30

SO Protein Eng. (1987), 1(3), 215-23  
CODEN: PRENE9; ISSN: 0269-2139

AB Pos. charge was added to insulins by substituting the B13 and A17 **glutamic acid** residues with glutamines and B27 threonine with **lysine** or arginine. These substitutions were introduced by site-specific mutagenesis in a gene coding for a single-chain insulin precursor. By tryptic transpeptidation the single-chain precursors were transformed to the double-chain insulin structure, concomitantly with incorporation of residue B30. Thus insulins combining B13 glutamine, A17 glutamine, and B27 **lysine** or arginine with B30 threonine, threonine amide or **lysine** amide were synthesized. The time course of blood **glucose** lowering effect and the absorption were studied after s.c. injection in rabbits and pigs. The prolonged action of B30-substituted insulins was markedly enhanced by B27 **lysine** or arginine substitutions and by B13 glutamine. The B27 residue is located on the surface of the hexamer, so a basic residue in this position presumably promotes the packing of hexamers at neutral pH. The B13 residues cluster in the center of the hexamer. When the electrostatic repulsive forces from 6 **glutamic acid** residues are abolished by substitution with glutamine, a stabilization of the hexamer can be envisaged. The biol. potency of insulins was measured in the free fat cell assay and in the mouse blood **glucose** assay test. A potency factor could be fitted to each substitution, so that the potency of analogs with .gtoreq.2 substitutions can be estd. by multiplication of the corresponding potency factors. A charge-indifferent substitution, B8 glycine to serine, resulted in insulins that crystallize well but have low potencies. A late elution in gradient reverse-phase HPLC indicates that hydrophobic amino acid residues were exposed as a result of this B8 substitution. This most likely results from distortion by the .alpha.-helix commencing at residues B7, permitted only by B8 glycine with dihedral angles (.PHI., .PSI.) of a D-amino acid.

L8 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS  
 AN 1999:763907 CAPLUS  
 DN 132:6372  
 TI Stable therapeutic **gene preparations**  
 IN Terada, Masaaki; Ochiya, Takahiro; Sano, Akihiko; Hisada, Akihiko;  
 Nagahara, Shunji  
 PA Sumitomo Pharmaceuticals Company, Limited, Japan; Koken Co., Ltd.  
 SO PCT Int. Appl., 64 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9961063	A1	19991202	WO 1999-JP2595	19990519
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9938488	A1	19991213	AU 1999-38488	19990519
	EP 1078639	A1	20010228	EP 1999-921163	19990519
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
PRAI	JP 1998-141426	A	19980522		
	WO 1999-JP2595	W	19990519		
RE.CNT	9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

=> d 1 14 au ti so 19

L9 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2002 ACS  
 IN Farwick, Mike; Mockel, Bettina; Pfefferle, Walter  
 TI Use of ptsH gene of Corynebacterium glutamicum for L-lysine biosynthesis  
 SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 755,187.  
 CODEN: USXXCO

L9 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2002 ACS  
 IN Mockel, Bettina; Pfefferle, Walter; Marx, Achim  
 TI Nucleotide sequences coding for the genes sucC and sucD  
 SO U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 728,498.  
 CODEN: USXXCO

L9 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2002 ACS  
 IN Nampoothiri, K. Madhavan; Mockel, Bettina; Eggeling, Lothar; Sahm,  
 Hermann  
 TI Protein and gene sequence of the cma gene encoded cyclopropane-mycolic  
 acid synthase of Corynebacterium glutamicum  
 SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 577,857,  
 abandoned.  
 CODEN: USXXCO

L9 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2002 ACS  
 IN Voss, Carsten  
 TI Preparation of supercoiled plasmid DNA by culture of bacteria in a  
 defined

- medium  
SO Ger. Offen., 22 pp.  
CODEN: GWXXBY
- L9 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Nampoothiri, Madhavan; Moeckel, Bettina; Eggeling, Lothar; Sahm, Hermann  
TI Genetically modified Coryneform bacteria with overexpressed cma  
**gene** and uses thereof in fermentative **preparation** of  
L-amino acids  
SO PCT Int. Appl., 42 pp.  
CODEN: PIXXD2
- L9 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Sugimoto, Masakazu; Nakai, Yuta; Ito, Hisao; Kurahashi, Osamu  
TI Process for producing l-amino acid and novel gene  
SO PCT Int. Appl., 39 pp.  
CODEN: PIXXD2
- L9 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Mockel, Bettina; Pfefferle, Walter; Marx, Achim  
TI Corynebacterium succinate dehydrogenase genes sdhA, sdhB, and sdhC and  
amino acid production with recombinant coryneform bacteria  
SO Eur. Pat. Appl., 29 pp.  
CODEN: EPXXDW
- L9 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Terada, Masaaki; Ochiya, Takahiro; Sano, Akihiko; Hisada, Akihiko;  
Nagahara, Shunji  
TI Stable therapeutic **gene preparations**  
SO PCT Int. Appl., 64 pp.  
CODEN: PIXXD2
- L9 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Ishihara, Hiroshi; Kawaguchi, Takayuki; Ikeda, Masahiro; Nakamoto,  
Kazutaka; Sasaki, Atsushi  
TI Preparation of sugar amidite derivatives and antisense oligonucleotide  
derivatives as antiviral and antitumor agents  
SO PCT Int. Appl., 84 pp.  
CODEN: PIXXD2
- L9 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Kuma, Hidekazu; Iijima, Osamu; Suzuki, Yousuke  
TI Pharmaceutical composition for preserving recombinant virus vectors for  
gene therapy  
SO PCT Int. Appl., 17 pp.  
CODEN: PIXXD2
- L9 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Tsuchiya, Makoto; Miwa, Kiyoshi  
TI Sucrase gene of coryneform bacteria and manufacture of amino acids or  
nucleic acids with recombinant coryneform bacteria  
SO U.S., 12 pp.  
CODEN: USXXAM
- L9 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Sugimoto, Masakazu; Otsuna, Seiko; Nagase, Kazuo; Tsuchiya, Makoto;  
Hiroshi, Matsui; Yasuhiko, Yoshihara; Nakamatsu, Tsuyoshi  
TI Sucrase gene derived from coryneform bacteria and manufacture of amino  
acids with recombinant microorganisms  
SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

L9 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2002 ACS  
IN Rudolph, Rainer; Kopetzki, Erhard; Fischer, Stephan; Grossmann, Adelbert;  
Hoell-Neugebauer, Baerbel  
TI Immobilized fusion proteins as biocatalysts: preparation and use  
SO Ger. Offen., 13 pp.  
CODEN: GWXXBX

L9 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2002 ACS  
AU Markussen, J.; Diers, I.; Engesgaard, A.; Hansen, M. T.; Hougaard, P.;  
Langkjaer, L.; Norris, K.; Ribel, U.; Soerensen, A. R.; et al.  
TI Soluble, prolonged-acting insulin derivatives. II. Degree of  
protraction  
and crystallizability of insulins substituted in positions A17, B8, B13,  
B27 and B30  
SO Protein Eng. (1987), 1(3), 215-23  
CODEN: PRENE9; ISSN: 0269-2139

=> d 9 10 bib ab 19

L9 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:746190 CAPLUS  
DN 126:19171  
TI Preparation of sugar amidite derivatives and antisense oligonucleotide  
derivatives as antiviral and antitumor agents  
IN Ishihara, Hiroshi; Kawaguchi, Takayuki; Ikeda, Masahiro; Nakamoto,  
Kazutaka; Sasaki, Atsushi  
PA Drug Delivery System Institute, Ltd., Japan  
SO PCT Int. Appl., 84 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PT	WO 9630386	A1	19961003	WO 1996-JP868	19960329
	W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML			
	CA 2216844	AA	19961003	CA 1996-2216844	19960329
	AU 9651227	A1	19961016	AU 1996-51227	19960329
	EP 821001	A1	19980128	EP 1996-907728	19960329
	R:	CH, DE, FR, GB, LT, NL, SE			
	US 6057431	A	20000502	US 1997-930677	19971222
PRAI	JP 1995-100009		19950331		
	WO 1996-JP868		19960329		
OS	MARPAT 126:19171				
AB	Comps. represented by general formula				
X(CH <sub>2</sub> ) <sub>m</sub> (T <sub>5</sub> )r(CH <sub>2</sub> ) <sub>n</sub> CH[(CH <sub>2</sub> )pT <sub>3</sub> T <sub>1</sub> F <sub>1</sub> ](					
CH <sub>2</sub> )qT <sub>4</sub> T <sub>2</sub> F <sub>2</sub> [X = NCCH <sub>2</sub> CH <sub>2</sub> OP(Y)O, Z-OP(O)(OH)O; Y = leaving group; Z =					
oligonucleotide or its deriv.; T <sub>1</sub> = (CH <sub>2</sub> ) <sub>s</sub> , (CH <sub>2</sub> CH <sub>2</sub> O)tCH <sub>2</sub> CH <sub>2</sub> ; wherein s =					
2-10; t = 1-3; T <sub>2</sub> = (CH <sub>2</sub> ) <sub>u</sub> , (CH <sub>2</sub> CH <sub>2</sub> O)vCH <sub>2</sub> CH <sub>2</sub> , Q; T <sub>3</sub> , T <sub>4</sub> , T <sub>5</sub> b = CONH,					
NHCO,					
O; provided that when either one of T <sub>3</sub> , T <sub>4</sub> , and T <sub>5</sub> represents O, the					
other					

two groups represent group other than O; F1, F2, F3 = monosaccharide selected from **galactose**, **glucose**, and galactosamine or its deriv., disaccharide consisting of these monosaccharide or their derivs., wherein hydroxy groups not participating in the reaction of

mono-

and disaccharides or their deriv. are optionally protected; m = 0-10; n, p, q = 0-4; r = 0,1]. These compds. can specifically transfer oligonucleotides into cells that specifically recognize specified sugar structures, inhibit expression of specific genes in cells of organs (in particular liver), and hence can be used as antiviral, antitumor, antirheumatic, antiinflammatory, and antiallergic agents, and immunosuppressants. Thus, tris[2-{2-(2-.beta.-D-galactopyranosyloxyethoxy)ethoxy}ethyl]-modified oligonucleotide phosphorothioate (glycopeptide) (I; R = Q1, wherein R1 = H), which was prepd. by the phosphoramidite method using a Cyclone Plus Nucleic Acid Synthesizer (Millipore) and phosphoramidite

NCCH2CH2P[N(CHMe2)2]O(CH2)3CO-

Gln(R)-Gln(R)-NHR (R = Q, wherein R1 = Ac) (prepn. given), at .apprx.1 .mu.M increased the proliferation-inhibiting activity for HepG2 cells .apprx.7 times greater than that of 5'-GGACTCAGACTCGCGTCC-3' phosphorothioate.

L9 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2002 ACS

AN 1996:685381 CAPLUS

DN 125:309076

TI Pharmaceutical composition for preserving recombinant virus vectors for gene therapy

IN Kuma, Hidekazu; Iijima, Osamu; Suzuki, Yousuke

PA Hisamitsu Pharmaceutical Co., Inc., Japan

SO PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9629096	A1	19960926	WO 1996-JP652	19960315
	W: AU, CA, CN, JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
SE	AU 9649544	A1	19961008	AU 1996-49544	19960315
	EP 872249	A1	19981021	EP 1996-906024	19960315
	R: CH, DE, FR, GB, LI, NL				
	JP 3193057	B2	20010730	JP 1996-528274	19960315
	US 5869306	A	19990209	US 1997-913592	19970912
PRAI	JP 1995-59261	A	19950317		
	WO 1996-JP652	W	19960315		

AB A process for producing **gene transfer prepns.** by freeze-drying a mixt. of a recombinant virus vector with at least one additive selected among arginine, **glutamic acid** (or sodium salt thereof), serine, **glucose**, inositol, **lactose**, **mannitol**, **sorbitol**, **trehalose** and xylose. The prepn. is to preserve the potency of the recombinant virus vectors. Prepn. of a compn. contg. recombinant MoMLV vector was shown.

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